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Date of Deposit: September 17, 1997

A/FWC

ATTORNEY'S DOCKET NO. **A0626/7029/AJM/SPD**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Andrew M. Soutar and Peter T. McGrath
Serial No: Not Yet Assigned
Filed: September 16, 1997
For: PROCESS FOR SILVER PLATING IN PRINTED CIRCUIT BOARD
MANUFACTURE
Examiner: Not Yet Assigned
Art Unit: Not Yet Assigned

FWC
ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Sir:

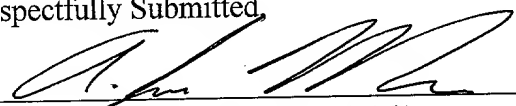
Transmitted herewith is/are the following document(s):

- ☒ File Wrapper Continuation Application under 37 CFR 1.62
- ☒ Preliminary Amendment
- ☒ Information Disclosure Statement
- ☒ Form PTO-1449 and References
- ☒ Copy of Petition for Two-Month Extension of Time filed in U.S. Patent Application
Serial No.: 08/567,886 on June 6, 1997
- ☒ Copy of Notice of Appeal filed in U.S. Patent Application Serial No.: 08/567,886 on June 6,
1997

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617)720-3500, Boston, Massachusetts.

A check in the amount of \$1122.00 is enclosed to cover the filing fee. If the fee is insufficient, the balance may be charged to the account of the undersigned, Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully Submitted,


A. Jason Mirabito, Reg. No. 28,161
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210-2211
(617)720-3500

Docket No. A0626/7029
September 17, 1997
xNDD

REQUEST FORM FOR FILE WRAPPER CONTINUING APPLICATION UNDER 37 CFR 1.62

Attorney's Docket Number A0626/7029/AJM/SPD	Anticipated classification of this application Class Subclass	Prior Application Examiner Brian K. Talbot Art Unit 1112
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Date of Deposit: September 17, 1997

TO: **BOX FWC**
ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

This is a request for filing a ☐ Continuation-in-part ☒ Continuation ☐ Divisional Application under 37 CFR 1.62 of prior application Serial No. 08/567,886, filed on December 8, 1995, entitled **PROCESS FOR SILVER PLATING IN PRINTED CIRCUIT BOARD MANUFACTURE** by the following named inventor(s).

ANDREW McINTOSH SOUTAR
6 Leslie Road
London N2 8BN, England
Citizenship: Great Britain

PETER THOMAS McGRATH
26693 Sotelo
Mission Viejo, CA 92692
Citizenship: Great Britain

The above-identified prior application in which no payment of the issue fee, abandonment of, or termination of proceedings has occurred, is hereby expressly abandoned as of the filing date of this new application. Please use all the contents of the prior application file wrapper, including the drawings, as the basic papers for the new application. (Note 37 CFR 1.60 may be used for applications where the prior application is not to be abandoned.)

1. ☐ Enter the amendment previously filed on _____ Under 37 CFR §1.116 but unentered, in the prior application.

2. ☒ A preliminary amendment is enclosed.

The filing fee is calculated on the basis of the claims existing in the prior application as amended at 1 and 2 above.

CLAIMS AS FILED

FOR	NUMBER FILED	NUMBER EXTRA	RATE	FEE
TOTAL CLAIMS	36 -20	= 16	X \$ 22.00	= \$ 352.00
INDEPENDENT CLAIMS	3 -3	= 0	X \$ 80.00	= \$
		BASIC FEE		= \$ 770.00
		<u>TOTAL FILING FEE:</u>		= \$1,122.00

3. ☐ The Commissioner is hereby authorized to:
☒ charge any deficiency in the enclosed fees which may be required or credit any overpayment in the enclosed fees to Deposit Account 23/2825. A duplicate copy of this sheet is enclosed.
☐ charge any fees which may be required under 37 C.F.R. §1.16 and §1.17 to deposit Account No. 23/2825. A duplicate copy of this sheet is enclosed.

4. ☒ A check in the amount of \$1122.00 is enclosed.

5. ☐ A new oath or declaration is included since this application is a continuation-in-part which discloses and claims additional matter.

6. ☒ Amend the specification by inserting before the first line the sentence:

This application is a ☐ continuation-in-part, ☒ continuation, ☐ division of application Serial No. 08/567,886, filed December 8, 1995.

7. ☐ A verified statement to establish small entity under 37 CFR 1.9 and 1.27
☐ is enclosed.

☐ was filed in the prior application no. _____, filed _____ and such status is still proper and desired (37 CFR 1.28(a)).

8. ☐ Priority of application Serial No. 9425030.5, filed on December 9, 1994 in United Kingdom is claimed under 35 U.S.C. 119.

9. ☒ The prior application is unassigned.

10. ☒ Also enclosed:

☒ Information Disclosure Statement
☒ Form PTO-1449 with references cited

11. ☒ The power of attorney in the prior application is to:

David Wolf	17,528	Philip G. Koenig	30,186	Timothy J. Oyer	36,628
George L. Greenfield	17,756	Anthony J. Mirabito	28,161	Kristofer E. Elbing	34,590
Stanley Sacks	19,900	Jason M. Honeyman	31,624	John N. Anastasi	37,765
David M. Driscoll	25,075	William A. Loginov	34,863	Brett N. Dorny	35,860
Edward F. Perlman	28,105	James H. Morris	34,681	David L. Cavanaugh	36,476
Lawrence M. Green	29,384	Anthony J. Janiuk	29,809	Helen C. Kindregan	39,248
Steven J. Henry	27,900	Peter C. Lando	34,654	James M. Hanifin, Jr.	39,213
Therese A. Hendricks	30,389	Gary S. Engelson	35,128	David E. Huang	39,229
Edward R. Gates	31,616	Peter J. Gordon	35,164	Thomas M. Sullivan	39,392
William R. McClellan	29,409	Randy J. Pritzker	35,986	Christopher S. Schultz	37,919
Ronald J. Kransdorf	20,004	Richard F. Giunta	36,149	Paul D. Sorkin	39,039
M. Lawrence Oliverio	30,915	Douglas R. Wolf	36,971	Douglas C. Doskocil	P-39,660
James J. Foster	30,052	Helen A. Greer	36,816	John R. Van Amsterdam	P-40,212
Charles E. Pfund	17,030	Elizabeth R. Plumer	36,637		

- a.[X] The power appears in the original papers in the prior application.
b.[] Since the power does not appear in the original papers, a copy of the power in the prior application is enclosed.
c.[] A new power has been executed and is attached.
d.[] Address all future communications: (May only be completed by applicant, or attorney or agent of record)

A. Jason Mirabito
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210
Tel: (617) 720-3500

It is understood that secrecy under 35 U.S.C. 122 is hereby waived to the extent that if information or access is available to any one of the applications in the file wrapper of a 37 CFR 1.62 application be it either this application or a prior application in the same file wrapper, the Patent and Trademark Office may provide similar information or access to all the other applications in the same file wrapper.

September 17, 1997

Date


A. Jason Mirabito

Person signing is:

- [] Inventor(s)
[] Assignee of complete interest
[X] Attorney or agent of record
[] Filed under 37 CFR §1.34(a)

Registration number if acting under 37 CFR 1.34(a) 28,161.

Rev. 10/05/94

Express Mail Label No.: EM192472837US
Date of Deposit: September 17, 1997

ATTORNEY'S DOCKET NO: **A0626/7029/AJM/SPD**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Andrew M. Soutar and Peter T. McGrath
Serial No: Not Yet Assigned
Filed: Herewith
For: PROCESS FOR SILVER PLATING IN PRINTED CIRCUIT
BOARD MANUFACTURE

Examiner: Not Yet Assigned
Art Unit: Not Yet Assigned

BOX FWC
Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sirs:

Prior to examination of the above-identified patent application, Applicants respectfully request consideration of the following amendments.

IN THE CLAIMS

Please add the following new claims:

37. A process according to claim 18, wherein the exposed metal conductor is an exposed copper conductor.

38. A process according to claim 18, wherein the silver ions are present in the aqueous composition in a concentration of from 0.06 g/l to 32 g/l.

39. A process according to claim 18, wherein the complexing agent of the aqueous solution has a first molarity and the silver ions of the aqueous solution have a second molarity, the first molarity being greater than the second molarity.

40. A process according to claim 18, wherein the complexing agent of the aqueous composition is present in an amount from 0.1 g/l to 250 g/l.

41. A process according to claim 18, wherein the complexing agent of the aqueous composition is selected from the group consisting of ethylenediamine tetra-acetic acid, diethylenetriamine penta-acetic acid, N,N,N',N'-tetrakis (2-hydroxy propyl) ethylene diamine and mixtures thereof.

42. A process according to claim 18, wherein the aqueous composition further includes a compound selected from the group consisting of a surfactant, a wetting agent, a stabilizer, a grain refiner, a tarnish inhibitor and mixtures thereof.

43. A process according to claim 42, wherein the complexing agent is a surfactant that has a concentration of from 1 g/l to 15 g/l in the aqueous solution.

44. A process, comprising the steps of:
applying a mask to cover a metal surface of a substrate, the metal surface having an electropositivity less than an electropositivity of silver, the mask being an insulator; and
contacting the metal surface with an aqueous composition comprising silver ions and a complexing agent that is a multidentate ligand, the aqueous composition having a pH of from 2 to 12, to form a coating of silver on the metal surface, wherein the aqueous composition is free of ingredients selected from the group consisting of ammonium ions, thiosulfate ions and combinations thereof.


REMARKS

CONCLUSION

In view of the foregoing remarks and amendments, Applicants believe that each of pending claims 1-26 and 34-44 is in condition for allowance. A notice to this effect is earnestly solicited.

If, upon receipt and consideration of this amendment, the Examiner believes that this application is not in condition for allowance, the Examiner is respectfully requested to contact Applicant's undersigned counsel at the number given below.

Respectfully submitted,



A. Jason Mirabito, Reg. No. 28,161
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, MA 02210
(617) 720-3500

Attorney's Docket No. A0626/7029

Date: September 17, 1997

ATTORNEY'S DOCKET NO.: A0626/7001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Andrew M. Soutar et al.
Serial No: 08/567,886
Filed: December 8, 1995
For: PROCESS FOR SILVER PLATING IN PRINTED CIRCUIT BOARD
MANUFACTURE
Examiner: Brian K. Talbot
Art Unit: 1112

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

**NOTICE OF APPEAL FROM THE PRIMARY EXAMINER
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant hereby appeals to the Board of Patent Appeals and Interferences from the decision dated January 7, 1997 of the Primary Examiner finally rejecting claims 1, 3-7, 10-16, 21-36.

The Appeal Fee of \$300.00 is enclosed. If for any reason the fee is insufficient, please charge the balance to Deposit Account 23/2825 of the undersigned attorneys. A duplicate of this sheet is enclosed.

Respectfully submitted,

Andrew M. Soutar et al.

I HEREBY CERTIFY THAT THIS
CORRESPONDENCE IS DEPOSITED WITH THE
UNITED STATES POSTAL SERVICE AS FIRST
CLASS MAIL IN AN ENVELOPE ADDRESSED TO:
ASSISTANT COMMISSIONER FOR PATENTS,
WASHINGTON, DC 20231, ON

June 6, 1997

DATE


A. Jason Mirabito
Registration No. 28,161
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210
Tel. (617)720-3500

Date: June 6, 1997
xdd: June 7, 1997